



The LongPath

A North Alabama DX Club Publication

Special points of interest:

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- NADXC Christmas Party
- The Story of our Flag
- 40m Propagation de W3LPL

From the President

By Mark Brown, N4BCD

Happy Holidays everyone! We want to be sure everyone is aware so I beg forgiveness at repeating – **our December meeting date / Christmas dinner meeting is NEXT TUESDAY, December 6 at Terranova's at 6 PM.** The date was moved due to venue availability and we hope you and your spouse can join us for a fun evening with good food & fellowship.

Regular users of the W4QB repeater noticed some downtime through the Thanksgiving weekend and a report from Ron W4VM is that it's back up. The culprit: the Squelch Operated Relay (SOR) was SOL. We thank Ron and his technical team for both their quick repair and the use of his alternate repeater which proved very useful the CQWWCW weekend.

I'm happy to report that many of our club member's commitment and involvement in K4BFT's Field Day effort has resulted in another First Place finish in 4A and 7th place out of 2735 entries! It's very gratifying to be involved with such a talented TEAM of hams who rally to put forth such an effort year after year.

Haven't done much at the radio or with antennas this fall due to family commitments and

How to Join

- * Come to a club meeting;
- * or send in an application by mail (form on www.NADXC.org)
- * or call Tom Duncan at (256)705-2147



N4BCD Christmas Decorations: Lighted star at 65'

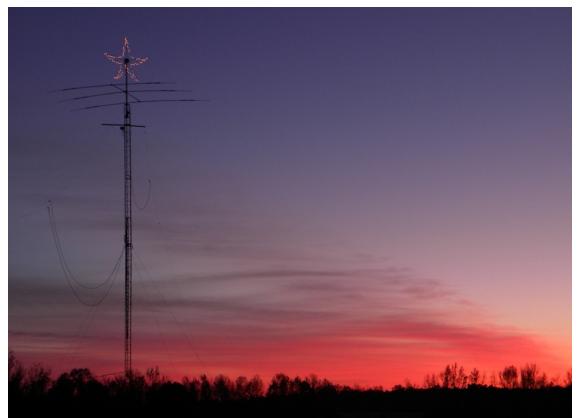
home projects but did find some time to install the lighted star atop the tower and build a lighted tree supported by the Beverage antenna. Living on a larger property meant using every junk box extension cord to reach them.

As I look forward to the New Year, I'm excited for the club – our banquet during the Hamfest continues to gain popularity. I'm excited to hear reports from the guys headed to Ohio in May for the Dayton Hamvention's move to Zenia. I'm excited at the thought of completion of the ongoing multiple home projects will free up some time for radio and antenna work. I'm excited to a part of a vibrant North Alabama community of amateur radio DX'ers, contesters, rag-chewers, and even moon-bouncers.

73, Merry Christmas & Happy New Year,

Mark N4BCD

North Alabama DX Club - President



Five strings of C-7 lights hung from a PVC pipe attached to Beverage antenna end post

November Meeting Minutes
Kelley Johns, W4VPZ, NADXC Secretary/Treasurer

Announcements

The Club's Christmas dinner has been moved from the usual 2nd Tuesday of the month to the 1st Tuesday in December. Our room at Terranova's Italian Restaurant was reserved by another group for our usual night. We will meet at the restaurant at 6:00 on Tuesday, December 6.

KCOW and his "Cows Over the World DXpedition" is back on the air in the Philippines. Members may recall that Tom had suffered the loss of all his equipment in a robbery.

Howard W4KTX has finished the CWOPS code class, the same class that HARC used for the CW instruction last year. The CWOPS program meets twice a week for about 16 weeks, with a "graduation" exercise at 20 wpm. Congratulations, Howard!

2017 NADXC Officers and Directors

President	Mark Brown, N4BCD
Vice President	John Stensby, N5DF
Secretary/	Kelley Vann-Johns, W4VPZ
Treasurer	
At-large	Kevin Hibbs, KG4TEI
Directors	Tom Duncan, KG4CUY

Tom N4KG announced that Cambodia has been active lately.

Treasurer's Report

Beginning Balance	\$ 4,538.62
Deposits & Credits	
Bouvet Contribution	\$
100.00	
Withdrawals	
Checking Supplies	\$ 49.02
Drawing Prizes	\$ 57.53
Bouvet Support	\$ 1,000.00
DXer Plaque	- \$
46.86	
Ending Balance	\$ 3,485.21

The \$ 1,000 donation to Bouvet has been sent.

DX Worked

Steve AG4W	I, EA6, PA, UA on 2m
Johnny KR4F	ZL7G - 80m
Rob KB5EZ	ATNOs: Tonga, Libya, Samoa, Chatham Is., Central African Republic
Bob KC4TNC	CY4C 30-20-17 St. Paul CA
Jim N4KH	ZL7G, KS4L
Chris KF4MMF	Haiti, St. Kitts V4TT
Gary W9SGM	visited Nova Scotia & PEI
Ralph K1KOB	PJ4/NT5V 30 RTTY, J6/NX8G 17 RTTY, VP3EGR 17 RTTY
Bruce AC4G	ZL7G (160-12), V6Z
Tom N4KG	ZL7G 8B, V6Z

Meeting adjourned.

New Business

Ballot paper for the North Alabama DXer of Year were passed out and collected. A plaque will be awarded to the winner at the Christmas dinner.

Program

Steve AG4W presented on EME Communications

NADXC Christmas Party

If it seems like you haven't had a full month's respite (reprieve?) from the LongPath, you're right: this one is early, because the Christmas Party is a week early due to scheduling concerns. Note the time and place: 6:00 pm at Terra Nova's. We'll announce the DXer of the Year based on last month's voting, and this will be the last official meeting for our current officers—the new officers take the reigns at full gallop in January.

See you at Terra Nova's!



At the March [2010—Ed.] meeting, our club voted to supply a club flag to the 3W6C Con Co Island DXpedition at the request of its organizers. This was certainly too good an opportunity to pass up, but there was a problem—we don't have a flag. One needed to be created, and quickly.

It seemed only natural that the flag be based on the club logo. This begat some discussion on just what the logo's elements represent. The yagi (either 4- or 5- element, depending on the rendition) and state map are clear, but the concentric rings were a conundrum to many.

It turns out that the rings are actually a degenerate representation of a properly-shaped tuning knob, with a skirt, from the days when radios actually had such things. John Stensby, N5DF said this had been properly represented on a color patch available to club members in days past, and that very night located that patch and sent a picture of it, clearly showing the rings. The

have and will sponsor could be affixed, but that in the interest of getting the flag to the 3W6C crew by the March 31st drop-dead date, these names would be added later.

Based on John's patch, the LongPath graphics staff burnt the midnight oil to come up with a computer-readable logo as a basis for the flag. Whether this logo will survive the years John's already has is doubtful, but it will do for now.

were some decades ago, but have doubtless just heard the story that accompanies it without scrutinizing the needlework.

One mystery remained—the logo's designer, and when and how the logo had actually been designed. Chuck, N4NM allowed as how he had drawn the logo by hand, with pen and ink (on vellum, or perhaps papyrus) many years ago. Just how long ago Chuck couldn't say, but the club has been around a long time indeed, and no other members from those formative years were able to shed further light on Chuck's recollection, nor willing in the slightest to dispute it.

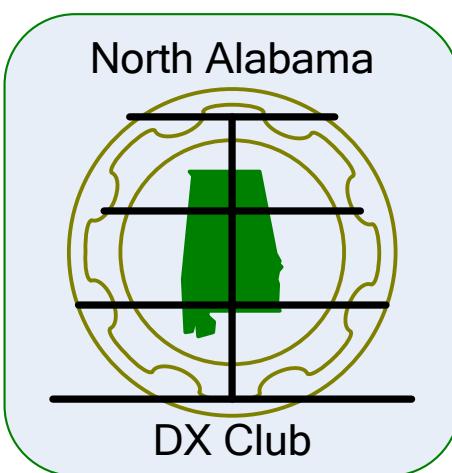
The original design was black ink on white paper, with the colors added later—possibly seamstress Betsy having taken that license. Printing and reproduction processes being what they were in those days, black and white served well for many years.

The LongPath research library contains many ancient texts, one of which yielded this facsimile of a woodcut of the actual creation of the NADXC logo in its most pure and original form, vindicating Chuck as both the logo's creator, and a great historian.

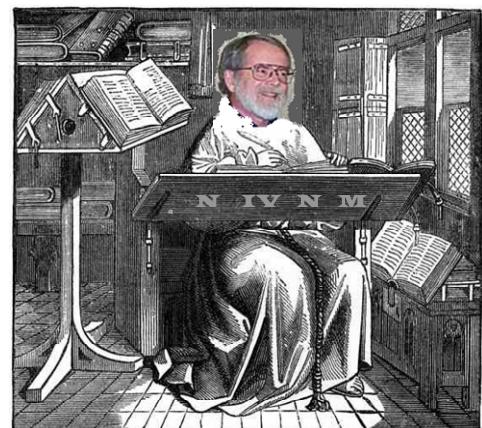


patch's origin, and that of the design itself were still shrouded in mystery, but at least we now had a colorful and more detailed ancestor of our current logo from which to design a flag.

It was suggested by those present at the March meeting that the flag should have some space on it next to the logo where the names of DXpeditions we



With the flag now in production, the baton was passed to the archivists to determine the origins of the patch's design, and the patch itself. A handy book on flags gave some insight. Grade-schoolers across the country are familiar with this picture, or at least they



And that, dear members, is the story of our club's logo. [Reprinted at the behest of the President from April, 2010 LongPath. - Ed.]

Editor: This is a great explanation from W3LPL on why could we run Europe on 40M this past weekend during WW CW. (from CQ Contest)

Congratulations, you've discovered some of the affects of low sunspot activity on DX contesting strategy. During the CQWW CW Contest those affects were compounded by the Earth directed affects of an unusually large and energetic solar coronal hole.

One of the most pronounced phenomena of the night time ionosphere during fall and winter is the "mid-latitude trough" (Google that term for more detail). Its a region of significantly depleted total electron content (much reduced MUF) just southward of the northern hemisphere auroral zone. The trough occurs during about half of the fall and winter nights, and it strongly affects propagation on high latitude paths such as the short path from eastern north America to Europe and Japan. During about half of those fall and winter nights (those nights when the trough is active), the trough typically develops near sunset at its westward end and rapidly disappears at sunrise at its eastern end.

Last weekend the night time auroral zone was pushed significantly southward by the affects of an unusually large and energetic earth-directed coronal hole that also pushed the mid-latitude trough directly over our north-Atlantic propagation paths to Europe and our high latitude short path to Japan. As a result, our best 40 meter propagation to Europe occurred during north American daylight hours and after European sunrise. The mid-latitude trough significantly shortens the duration of 40 meter propagation to Europe and Japan for stations located at more northerly latitudes and somewhat less for stations at more southerly latitudes

during those nights when the trough is active.

Our very brief short path propagation from the mid-Atlantic states to Japan occurred near JA sunset (0730-0830Z). Soon after JA sunset our propagation to Japan was mostly via the skew path that propagates via the tilted ionosphere about 20 degrees south of the equator. Our east coast short path to Japan usually strongly redevelops near east coast sunrise, but the affects of the coronal hole significantly degraded our short path to JA.

While the most pronounced affects of the trough are on 40 meter propagation, it also significantly shortens the duration of our openings to Europe and Japan on the higher bands, essentially terminating the openings near sunset at the eastern end of the paths during about half of the November through February nights when the trough is active.

It's a big mistake to consider 40 meters to be mostly a night time DX band near the bottom of the sunspot cycle. Daytime 40 meter DX is significantly enhanced near the bottom of the sunspot cycle by the reduced daytime E-layer MUF which otherwise blankets the

F layer during most daylight hours nearer the top of the sunspot cycle. As a result, DX propagation is possible on 40 meters during most daylight hours, especially for stations located at higher latitudes from November through early February. During those months daytime propagation is common from the northern east coast USA to northern Europe even at high noon.

Close to the bottom of the sunspot cycle, both the short and long paths are strongly open from the East coast to Japan on 40 meters during many December and early January late afternoons from 2130Z to about 2215Z. If you have a directive antenna, some JA stations can be worked on only one of those paths if they're also using a directive antenna. Without a directive antenna, some JA signals can be an unreadable blur of overlapping echos.

True long paths from the USA to Japan (not skew paths) rarely exhibit scintillation affects that are usually observed on the short path because the long path propagates well away from the southern auroral zone during the southern latitude summer.

73,

Frank W3LPL

Latitude Variations

